

AMENDMENTS TO THE CLAIMS

1. - 42. **Cancelled**

43. **(Currently amended)** A breast cup assembly comprising:

a bottle attachment end for connecting to a vacuum source;

a large open end opposite the bottle attachment end for accepting a woman's breast;

a holder comprising:

a small end residing proximal to the bottle attachment end of the breast cup assembly and including a holder engaging feature;

a large end opposite the small end and having a larger diameter than the small end; and

a center portion connecting the small end to the large end, the center portion having at least one air path passing radially through the holder to allow free movement inside the holder;

a single layer breast cup made of biocompatible material and supported inside the holder, the breast cup having an inner surface exposed to the vacuum source and an outer surface exposed to atmospheric pressure, the breast cup sequentially comprising;

a connecting portion residing proximal to the bottle attachment end of the breast cup assembly and ~~supported~~ including a cup engaging feature engaged by the holder engaging feature of the small end of the holder for retaining the breast cup in the holder; the connecting portion ~~for connecting~~ connectable to the vacuum source;

a cylindrical middle area formed contiguous to the connecting portion, and configured for receiving a teat of a breast and having a first thickness; and

a cone shaped portion formed contiguous to the middle area, and configured for receiving a portion of the breast, the cone shaped portion increasing in diameter away from the middle area ~~mid-portion~~ to the large open end, and supported

26 proximal to the large open end by the large end of the holder, the cone shaped portion
27 having a second thickness,
28 wherein the second thickness is less than the first thickness so that upon
29 application of vacuum to the connecting portion the cone shaped portion distorts before
30 the mid portion distorts.

1 44. **(Currently amended)** The breast cup assembly of Claim 43, wherein;
2 ~~the connecting portion of the breast cup includes~~ the cup engaging feature
3 comprises a fastening wedge and the ~~small end of the holder includes~~ holder engaging
4 feature comprises a complementary ridge; and
5 the connecting portion of the breast cup is insertable into the small end of the
6 holder so that the fastening wedge catches on the complementary ridge to retain the
7 breast cup in the holder.

45. **(Previously entered)** The breast cup assembly of Claim 44, wherein;
the fastening wedge is frusto conical in shape decreasing in diameter toward the
front of the breast cup and having a rearward facing wedge face extending inward; and
the complementary ridge includes a forward facing ridge face for cooperation
with the wedge face to retain the breast cup in the holder.

1 46. **(Previously entered)** The breast cup assembly of Claim 43, wherein:
2 the center portion of the holder comprises at least two ribs connecting the small
3 end to the large end; and
4 gaps between the ribs provide the air path passing through the holder to allow
5 free movement of the breast cup inside the holder.

47. **(Previously entered)** The breast cup assembly of Claim 46, wherein the cone
shaped portion of the breast cup includes a thickened ridge for adding stability to the
large open end of the breast cup assembly and a platform providing a stable base for the
large end of the holder.

1 48. **(Previously entered)** The breast cup assembly of Claim 47, wherein the entire
2 inner surfaces of the middle area of the breast cup and the cone shaped portion of the
3 breast cup are exposed to the vacuum source and the entire outer surfaces of the
4 middle area of the breast cup and the cone shaped portion of the breast cup, with the
5 exception the platform of the cone shaped portion, are exposed to the atmospheric
6 pressure.

49. **(Previously entered)** The breast cup assembly of Claim 46, further including a
smooth radius transitioning from the cylindrical middle area to the cone shaped portion.

50. **(Previously entered)** The breast cup assembly of Claim 43, wherein the
connecting portion and the middle area of the breast cup comprise approximately 2/3 of
the total length of the breast cup and the cone shaped portion comprises approximately
1/3 of the total length of the breast cup.

51. **(Previously entered)** The breast cup assembly of Claim 43, wherein the first
thickness of the breast cup is about 0.175 inches.

52. **(Previously entered)** The breast cup assembly of Claim 43, wherein the
cylindrical middle area is about one inch in diameter.

53. **(Previously entered)** The breast cup assembly of Claim 52, wherein the large
open end is about 3.5 inches in diameter.

54. **(Previously entered)** The breast cup assembly of Claim 43, wherein the breast
cup is made from silicone rubber.

1 55. **(Previously entered)** A breast cup assembly comprising:
2 a bottle attachment end for connecting to a vacuum source;

3 a large open end opposite the bottle attachment end for accepting a woman's
4 breast;
5 a holder comprising:
6 a round cross-section small end residing proximal to the bottle attachment
7 end of the breast cup assembly and including an internal passage with a forward facing
8 ridge face;
9 a round cross-section large end opposite the small end and having a
10 larger diameter than the small end; and
11 a center portion connecting the small end to the large end, the center
12 portion having at least one air path passing radially through the holder to allow free
13 movement inside the holder;
14 a single layer breast cup made of biocompatible material and supported inside
15 the holder, the breast cup having an inner surface exposed to the vacuum source and
16 an outer surface exposed to atmospheric pressure, the breast cup sequentially
17 comprising;
18 a connecting portion residing proximal to the bottle attachment end of the
19 breast cup assembly and supported by the small end of the holder and including a
20 fastening wedge tapering small to the front of the breast cup and including a rearward
21 facing wedge face; the connecting portion for connecting to the vacuum source;
22 a cylindrical middle area formed adjacent to the connecting portion, and
23 configured for receiving a teat of a breast; and
24 a cone shaped portion formed adjacent to the middle area, and configured
25 for receiving a portion of the breast, the cone shaped portion increasing in diameter
26 away from the mid portion to the large open end, and supported proximal to the large
27 open end by the large end of the holder,
28 wherein the breast cup assembly is formed by inserting the breast cup into the
29 holder wherein the fastening wedge catches on the complementary ridge to retain the
30 breast cup in the holder.

1 56. **(Previously entered)** The breast cup assembly of Claim 55, wherein;

2 the fastening wedge is frusto conical in shape decreasing in diameter toward the
3 front of the breast cup and having a rearward facing wedge face extending inward; and
4 the complementary ridge includes a forward facing ridge face for cooperation
5 with the wedge face.

1 57. **(Previously entered)** The breast cup assembly of Claim 56, wherein:
2 the center portion of the holder comprises at least two ribs connecting the small
3 end to the large end; and
4 gaps between the ribs provide the air path passing through the holder to allow
5 free movement of the breast cup inside the holder.

58. **(Previously entered)** The breast cup assembly of Claim 55, wherein the cone
shaped portion of the breast cup includes a thickened ridge for adding stability to the
large open end of the breast cup assembly and a platform providing a stable base for
the large end of the holder.

1 59. **(Previously entered)** The breast cup assembly of Claim 55, wherein;
2 the cylindrical middle area has a first thickness;
3 the cone shaped portion has a second thickness; and
4 the second thickness is less than the first thickness so that upon application of
5 vacuum to the connecting portion the cone shaped portion distorts before the mid
6 portion distorts.

1 60. **(Currently amended)** A breast cup assembly comprising:
2 a bottle attachment end for connecting to a vacuum source;
3 a large open end opposite the bottle attachment end for accepting a woman's
4 breast;
5 a holder comprising:
6 a round cross-section small end residing proximal to the bottle attachment
7 end of the breast cup assembly;

8 a round cross-section large end opposite the small end and having a
9 larger diameter than the small end; and

10 a center portion connecting the small end to the large end, the center
11 portion having at least one air path passing radially through the holder to allow free
12 movement inside the holder;

13 a single layer breast cup made of biocompatible material and supported inside
14 the holder, the breast cup having an inner surface exposed to the vacuum source and
15 an outer surface exposed to atmospheric pressure, the breast cup sequentially
16 comprising;

17 a connecting portion residing proximal to the bottle attachment end of the
18 breast cup assembly and insertable into the small end of the holder, wherein the
19 connection portion includes an interior surface for receiving a vacuum source and an
20 exterior surface for cooperation with the small end of the holder wherein insertion of the
21 vacuum source into the connecting portion biases the exterior surface of the connecting
22 portion against the small end of the holder to hold the breast cup in the holder;

23 a cylindrical middle area formed adjacent to the connecting portion, and
24 configured for receiving a teat of a breast; and

25 a cone shaped portion formed adjacent to the middle area, and configured
26 for receiving a portion of the breast, the cone shaped portion increasing in diameter
27 away from the mid portion to the large open end, and supported proximal to the large
28 open end by the large end of the holder,

29 wherein the breast cup assembly is formed by inserting the breast cup into the
30 holder wherein ~~the~~ a fastening wedge on the connecting portion of the breast cup
31 catches on ~~the~~ a complementary ridge of the small end of the holder to retain the
32 breast cup in the holder.

1 61. **(Previously entered)** The breast cup assembly of Claim 60, wherein;
2 the connecting portion of the breast cup includes a fastening wedge and the
3 small end of the holder includes a complementary ridge; and
4 the connecting portion of the breast cup is insertable into the small end of the
5 holder so that the fastening wedge catches on the complementary ridge to retain the
6 breast cup in the holder.

1 62. **(Previously entered)** The breast cup assembly of Claim 60, wherein;
2 the cylindrical middle area has a first thickness;
3 the cone shaped portion has a second thickness; and
4 the second thickness is less than the first thickness so that upon application of
5 vacuum to the connecting portion the cone shaped portion distorts before the mid
6 portion distorts.

1 63. **(Previously entered)** The breast cup assembly of Claim 60, wherein:
2 the cone shaped portion of the breast cup includes a thickened ridge for adding
3 stability to the large open end of the breast cup assembly and a platform providing a
4 stable base for the large end of the holder; and
5 the entire inner surfaces of the middle area of the breast cup and the cone
6 shaped portion of the breast cup are exposed to the vacuum source and the entire
7 outer surfaces of the middle area of the breast cup and the cone shaped portion of the
8 breast cup, with the exception the platform of the cone shaped portion, are exposed to
9 the atmospheric pressure.

64. **(New)** A breast cup assembly comprising:

- a bottle attachment end for connecting to a vacuum source;
- a large open end opposite the bottle attachment end for accepting a woman's breast;
- a holder comprising:
 - a small end residing proximal to the bottle attachment end of the breast cup assembly;
 - a large end opposite the small end and having a larger diameter than the small end; and
 - a center portion connecting the small end to the large end, the center portion having at least one air path passing radially through the holder to allow free movement inside the holder;
- a single layer breast cup made of biocompatible material and supported inside the holder, the breast cup having an inner surface exposed to the vacuum source and an outer surface exposed to atmospheric pressure, the breast cup sequentially comprising:
 - a connecting portion residing proximal to the bottle attachment end of the breast cup assembly and supported by the small end of the holder; the connecting portion connectable to the vacuum source;
 - a cylindrical middle area formed contiguous to the connecting portion, residing collapsibly inside the holder in fluid communication with the vacuum source through the connecting portion, configured for receiving a teat of a breast, and having a first thickness; and
 - a cone shaped portion formed contiguous to the middle area, and configured for receiving a portion of the breast, the cone shaped portion increasing in diameter away from the middle area to the large open end, and supported proximal to the large open end by the large end of the holder, the cone shaped portion having a second thickness,
- wherein the second thickness is less than the first thickness so that upon application of vacuum to the connecting portion the cone shaped portion collapses and

then the cylindrical middle area collapses while remaining in fluid communication with the vacuum source thereby mimicking the suckling of an infant.

65. **(New)** A breast cup assembly comprising:

- a bottle attachment end for connecting to a vacuum source;

- a large open end opposite the bottle attachment end for accepting a woman's breast;

- a holder comprising:

 - a small end residing proximal to the bottle attachment end of the breast cup assembly;

 - a large end opposite the small end and having a larger diameter than the small end; and

 - a center portion connecting the small end to the large end, the center portion having at least one air path passing radially through the holder to allow free movement inside the holder;

- a single layer breast cup made of biocompatible material and supported inside the holder, the breast cup having an inner surface exposed to the vacuum source and an outer surface exposed to atmospheric pressure, the breast cup sequentially comprising;

- a connecting portion residing proximal to the bottle attachment end of the breast cup assembly and supported by the small end of the holder; the connecting portion receiving a hollow male extension connecting the breast cup to the vacuum source;

- a cylindrical middle area formed contiguous to the connecting portion and configured for receiving a teat of a breast and having a first thickness; and

- a cone shaped portion formed contiguous to the middle area, and configured for receiving a portion of the breast, the cone shaped portion increasing in diameter away from the middle area to the large open end, and supported proximal to the large open end by the large end of the holder, the cone shaped portion having a second thickness,

28 wherein the second thickness is less than the first thickness so that upon
29 application of vacuum to the connecting portion the cone shaped portion collapses and
30 then the cylindrical middle area collapses thereby mimicking the suckling of an infant.